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## MICROMINIATURIZATION 1960-1961; A BIBLIOGRAPHY

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ARTICLES

- Aerospace electronic components. Space/Aeronautics, v.34, December 1960, p.93-148. (Special issue)
- Anderson, W.W. Wide-band resonance isolator. IRE Trans. on Microwave Theory and Techniques, v.MTT-9, no.1, January 1961, p.63-67.
- Dearnaley, G. Preparation of thin self-supporting carbon films. Review of Scientific Instruments, v.31, no.2, February 1960, p.197-198.
- Deubner, A. and Schulz, F. Leitfahigkeitsaenderung duenner Kupferoxydulschichten bei elektrostatischer Aufladung. Annalen der Physik, v.5, no.3-4, 1960, p.113-128.
- Dietrich, W. et al. Nanosecond switching in thin magnetic films. IBM Journal of Research and Development, v.4, no.2, April 1960, p.189-196. (Bibliography)
- Distributed parameter networks for microminiaturization. Electrical Manufacturing, v.65, no.4, April 1960, p.92-96.
- Dombrowski, E. and Pieper, H.D. Physik und technik mikrominiaturisierter Gerate. Flugkorper, v.2, no.3, February 1961. (In German)
- Fisher, J.C. Thin films. Physics Today, v.13, no.2, February 1960, p.32-36. Review of International Conference on Structure and Properties of Thin Films, Lake George, Sept. 9-11, 1959.
- Franklin, P.J. and Horsey, E.F. Materials and techniques for microminiaturization — I and II. Electrical Manufacturing, v.65, no. 5 and 6, May and June 1960, p.274 and p.135. Extensive bibliography.
- Guidelines to microminiature designs. Electronic design, v.8, November 9, 1960, p.61-97. (Special issue)

- Harper, C.A. Resins for embedding electronic packaging. Electronics, v.34, no.7, February 17, 1961, p.130-132.
- Herwald, S.W. Capabilities of molecular electronics. Automatic Control, v.12, no.3, March 1960, p.13-15.
- In tiny devices, a revolution. Life, v.50, no.10, March 10, 1961, p.60-68B.
- Javits, A.E. Introduction to molecular engineering. Electrical Manufacturing, v.65, no. 5, May 1960, p.35-54.
- Klass, P.J. Honeywell expands micro-electronics. Aviation Week, v.74, no.9, February 27, 1961, p.69-73.
- Microelectronics. Electrical Manufacturing, v.66, no.3, September 1960, p.121-126.
- Microelectronics. Process Control and Automation, v.8, no.2, February 1961, p.58-60.
- Miller, B. Simplified bio-instrumentation studies. Aviation Week, v.74, no.6, February 6, 1961, p.52-67.
- Perugini, M.M. and Lindgren, N. Microminiaturisation. Electronics, v.33, November 25, 1960, p.77-108. (Special issue)
- Suran, J.J. Circuit considerations relating to microelectronics. IRE Proceedings, v.49, no.2, February 1961, p.420-426.
- Tatsuguchi, I. UHF strip transmission line hybrid junction. IRE Trans. on Microwave Theory and Techniques, v.MTT-9, no.1, January 1961, p.3-5.
- Thun, R.E. et al. Automatically controlling vacuum deposition. Automatic Control, v.14, no.2, February 1961, p.26-31. Bibliography.
- Weber, H.J. Design of vacuum deposited microcircuitry. Military Systems Design, v.5, no.1, January-February 1961, p.12-15.
- Wein, S. Nickel and cobalt films. Glass Industry, v.41, no.1, January 1960, p.22-23. Review of the literature.

## DOCUMENTS

- Army. Diamond Ordnance Fuse Labs. Progress in miniaturisation and microminiaturisation. January-March 1960. (Quarterly Progress Report No. 3. DOFL Report - PR - 60 - 3) AD19561 Confidential.
- Army Signal Research and Development Labs. Functional microelectronics, micromodules, integrated circuits, microminiaturisation and moletronics. W.W. Gastner. AD242975 (6044 p.24).
- Autonetics. A guide to the literature on microminiaturisation. G.I. Chandler. May 1, 1960. (Report No. EM-6100) AD241968.
- Convair. Pomona Div. Electronics and Guidance Group. Advanced microwave miniaturisation techniques; Final report by P.S. Wessels. January 5, 1960. (Engineering Research Report PQ-002) A17614.
- Electronic Defense Labs. Transistorisation and miniaturisation techniques. January 29, 1960. (Engineering Report EDL-E41) NEL.
- Fulmer Research Institute (Gt. Brit.) The spacing of slip lines in metals. J.T. Barnby. June 1959 - June 1960. (Annual Technical Report No.3) AD243877.
- IBM Corporation. Federal Systems Division. Three-dimensional wiring techniques: Final Report. January 1960. (WADC-TR-59-645) A25960.
- Mallory, P.R. and Co. Development and fabrication of improved miniature resonant circuits. January 15, 1960. (Contract DA-36-039-SC-74907; Final Report) NEL
- Mallory, P.R. and Co. Miniaturized components for stable, tunable resonant circuits. (Contract DA-36-039-SC-64640; Final Report) NEL
- Navy - Bureau of Ships. Handbook of miniature parts for electronic equipment. April 15, 1960. (Navy Ships 93,400) NEL
- North Carolina University. Electric and magnetic properties of very thin films with special emphasis on superconductivity. June 1959 - May 1960. (Annual Summary Report) A244745.
- Picatinny Arsenal. Feltman Research Labs. Evaluation of plastic encasing materials. A.E. Molson and S.A. Slots. August 1960. (FRL-T-44) AD243025L.
- Polytechnic Institute of Brooklyn. Formation and study of thin ferrite films. E. Banks et al. April - June 1960. (Progress Report No. 8) AD243745.

Radiation Research Corporation. Film dielectric capacitance. J.R. Coleman. July 1958 - June 1960. (Final Report) AD243443.

Radio Corporation of America. David Sornoff Research Center. Molecular amplifiers and generators. H.R. Lewis. July 1, 1956 - August 31, 1960. (Final progress report) A26763.

Radio Frequency Labs. Electronic assembly technique, wiring by welding method. (Contract NOber - 49242-Final Development Report) NEL

RCA. Defense Electronic Products. Micro-module production program. April-July 1960. (Quarterly Report No.9) AD245506.

Stanford Research Institute. Applied research in microminiature field emission tubes. W.W. Hansen. April - July 1960. (Quarterly Progress Report No.4) AD245349.

Stanford Research Institute. R and D work relating to cable connecting networks for micro-modular equipment. J.R. Anderson. February 15-August 15, 1960. (Semi-annual Tech. Report No.1) AD245648.

Stanford Research Institute. Research in microelectronics using electron-beam-activated machining techniques. September 1960. (Contract Nonr-2887(00) Interim Scientific Report) NEL

Stanford Research Institute. Research in microelectronics using electron-beam-activated machining techniques. K.R. Shoulders. September 1960. (Interim Sci. Report) AD243675.

Stanford Research Institute. Electromagnetics Lab. Design criteria for microwave filters and coupling structures. W.J. Getsinger. March - June 1960. (Technical Report No. 10) AD243857.

Stanford University Electronics Labs. An adaptive "Adaline" neuron using chemical "memistors". B. Widrow. October 17, 1960. (TR No. 1553-2) AD244790.

Stanford University Electronics Lab. Electron Devices Lab. Bibliography on solid state masers. A.E. Siegman. April 29, 1960. (Technical Report 156-6) A21855 RKF.

Sylvania Electric Product Corporation. Electronic Defense Labs. Miniaturization of dipole-like probe antennas. April 15, 1960. (Technical Report AD275)

Synthetic Mica Corp. Development of ultra high temperature dielectric materials for embedding and encapsulating electric components. May - August 1960. (Quarterly Progress Report No. 1) AD24584OL.

U.S. Navy. Office of Naval Research. Final report of ONR Study Group on Microelectronics. June 1960. (ONR-7) A25215.

#### BOOKS

Harper, C.A. Electronic Packaging With Resins. April 1961. McGraw-Hill.